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ABSTRACT

This review focuses on women in educational administration as compared with men. Recognizing sex discrimination as an historical fact, the author begins by discussing some of the current psychological effects of cultural conditioning, examines the counselor role with high school seniors who express an interest in executive and organizational activities, and then turns to those problems encountered in admissions to college and in obtaining financial aid while pursuing the degree. Finally, she deals with the employment conditions existing after the earning of one or more advanced degrees and relating to recruitment, promotions, salary increases, tenure, and trends for the future. (Author/MLF)

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SEX DISCRIMINATION PATTERNS IN EDUCATIONAL ADMINISTRATION

by

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Sex Discrimination Patterns in Educational Administration

Abstract

Women constituted 67 per cent of the public educational teaching profession but only 16 per cent of these women educators occupied administrative positions which were predominanatly at lower levels. The reason for this underutilization was obviously not one of entry into the profession, but of differential advancement for women and men within the ranks at all levels. Women in top administrative posts were practically non-existant. The literature showed that there definitely existed a lack of congruence betwenn the positive attitudes expressed by male administrators who did most of the hiring with the infinitesimally small number, or complete absence, of women hired. Women were not proportionally represented in terms of their availability. The root of the problem was all-pervasive as differential treatment occurred at every developmental stage. The recurring discrimination patterns showed that women in educational administration

1. were the last to be recognized under Title VII of the Civil Rights Act of 1964 (effective March 22, 1972) and the Equal Pay Act (effective July 1, 1972) under the Fair Labor Standards Act.

2. were excluded from policy-making meetings.

3. displayed aptitudes that were underutilized in the professions.

4. did not have equal representation within college departmental units and the number of women who eventually entered graduate school dramatically declined.

5. had lost the small yearly gains they experienced in earlier years in number of doctorates obtained.

6. were not hired chiefly because of their sex and that sex was a better independent predictor of rank than (1) time spent in administration, (2) number of years since completion of degree, (3) number of books published, or (4) number of years at current institution. Sex was also a better independent predictor of salary than such other factors as number of years of professional employment or doctoral degree and produced the greatest discrepancies.

7. were evaluated differentially from men by search committees frequently composed of only men.

8. had fewer initial job offers than men and were unable to secure positions in institutions they preferred in greater proportion than men.

9. did not apply for administrative posts simply because of nepotism rules, immobility, or because they felt that women who took the time to apply did not get the job anyway.

10. outnumbered men elementary teachers nearly 9:1--but 78 per cent of all elementary school principals were men.

11. were equal in representation to male high school teachers, yet 96 per cent of secondary school principals were men.

12. were only 3 per cent of 13,000 school superintendents.

13. had a median number of zero females in top administrative posts in the National Association of State Universities and Land-Grant Colleges while men had a median number of 18.

14. ranged from 2 to 35 per cent of the total faculty at the college and university level.

15. constituted fewer faculty members in schools exclusively for men than men in women's educational institutions.

16. were concentrated where they had powers and influence only over female students and faculty.

17. had no representation in many of the different functional units in the dean series.

18. were more apt to secure higher academic ranks than men for the variables of age, size of institution, and marital status: single.

19. were more likely to hold higher ranks if single or divorced than married women, the implication for married women being that the burden of child rearing was the woman's.

20. were the slowest to be promoted if in the Humanities.

21. were more likely to achieve higher ranks than their counterparts in other departments if in the health fields (medicine and nursing).

22. produced greater variability than men in predicting academic tenure for such predictors as university, age, and year of degree than time spent in administration.

23. showed lesser weight than men in the securing of academic tenure for the variable number of children when compared with time spent in administration.

24. started at a significantly lower base salary than men and promotion in rank for women required consideration of 5 more variables than for men with a somewhat lower resulting multiple R, indicating greater difficulty in predicting ranks among women than among men.

25. were gradually declining in numbers in state departments of education.

26. were channeled into positions that reflected [illegible] traditional women's roles (nutrition, library service, and homemaking) and only 3 per cent of the women held "titled" positions.

27. were several years older on the average than male administrators.

28. experienced a differential average salary which was at least $5000 lesser than the male average.

29. occupied about 5 per cent of all leadership positions in grades 16, 17, and 18; the average grade was GS 7 for women and GS 14 for men.

30. had no representation as NEA executive secretaries and were under-represented as presidents of union locals of the American Federation of Teachers.

31. were almost totally excluded from the field of educational research.

32. averaged 1 in8 as members of boards of trustees.

33. were being fired at twice the rate of men and married women at an even greater rate.

34. Similar recurring discrimination patterns showed that students and candidates or potential women in educational administration

34. thought that isolation was one of the most difficult forms of discrimination to endure.

35. expressed preferences that ranged from a low of 33 per cent to a high of 79 per cent for administrative activities.

36. showed that inadequate preparation was being received at the elementary and high school level especially in the area of mathematical skills for females and verbal skills for males.

37. selected mathematics as their most liked subject; yet all sorts of interest was expressed for activities that required this instruction.

38. were admitted to college in lesser proportions than men at all percentile levels: The closer a woman was to average, the more severe the discrimination became.

39. preferred colleague-colleague faculty-student relationships v the teacher-pupil, master-apprentice, employer-employee, or master-slave varieties.

40. Cultural conditions during the preschool era and concurrent with later school years

40. disclosed that prevalent attitudes about sex roles took root and were further augmented by the media.

41. indicated a lack of congruence on the part of male attitudes toward the sharing of the homemaking function and the actuality of performing these activities.

42. lacked those facilitative and educational institutions that enhance and help lead toward the elimination of these inhumane conditions.

MUHICH

Sex Discrimination Patterns in Educational Administration

Many facets of sex discrimination had been documented throughout the nation; for example, women in educational administration, executive, and professional positions were the last to be recognized under Title VII of the Civil Rights Act of 1964 (effective March 22, 1972) and the Equal Pay Act (effective July 1, 1972) under the Fair Labor Standards Act. Title IX of the Higher Education Amendments of 1972 banned sex discrimination against women students and employees at all levels by educational institutions that received Federal financial assistance. At the time of this writing, the proposed rules and regulations were open for suggestions for future revisions and additions. in reference to the noted deficiencies such as removal of sexism from the curriculum, requiring equal aggregate expenditures in the field of sports, delineating adequate enforcement procedures for the complying institutions, and access to due process procedures for violations.

The present movement for equality for women educators in the United States had deep historical roots in the earlier efforts of feminist groups. But the form it had taken during recent years arose mainly from contemporary conditions--the demeaning image of women in the media, the economic necessity for women to help or entirely support their families, the growing concern that the attitudes and actions of many parents and teachers assign different roles to boys and girls; the inhibiting effects on both sexes in developing their potential, pressure to enforce federal guidelines prohibiting sex bias in educational materials, technological developments that free women and men from many domestic tasks, new methods of family planning that changed the size of families and the conditions and consequences of sexual relationships, and the ever-increasing number of women pursuing higher education and becoming qualified for professional work. In addition, women educators had been influenced by the civil rights movements of the 1950s and the radical student movement of the 1960s.

This review had focused on women in educational administration as compared with men. The author recognized sex discrimination as an historical fact and began by discussing some of the current psychological effects of cultural conditioning, followed by examining the counselor role with high school seniors who expressed an interest in executive and organizational activities; eventually turning to those problems that were encountered in admissions to college, in obtaining financial aid if single or married while pursuing the degree; and finally, after earning one or more advanced degrees, employment conditions relating to recruitment, promotions, salary increases, tenure, and trends for the future.

Psychological Effects

The roots of cultural conditioning in which sex discrimination had its beginnings were the too prevalent attitudes that females were somehow less intelligent, less able, less resourceful, thus less important than males (Percy, 1974). Sexism, unfortunately, was an integral part of the attitudes and actions which had relegated women to a

secondary and inferior status in society; and sex-role stereotyping in textbooks and educational materials was, without a doubt, a major contributing factor to the pervasiveness of sexism in education (Percy, 1974).

In anthropological studies such as Mead (1963; 1950), it was shown that personality characteristics and sexuality were instilled through a society's cultural institutions and that not one psychological characteristic was shard in common by either sex across several cultures other than the creation of religion, which differed in type from one culture to the next. Attitudes toward the sexes (such as preconceived stereotyped roles designated for women and men) were especially augmented in the home during the preschool years and, later in the schools (National Organization for Women, 1972a; Macleod & Silverman, 1973; [illegible] Adamsky & Kaspar, In process textbook survey) and the media (National Organization for Women, 1972b; Mellen, 1973).

In reviewing the sexuality of women in a number of recent films, the perception of women's capacities and character by the producers portrayed women as self-hating narcissists, passive, cunning, emotionally empty, demonic, empty-headed, incompetent, infantile, simperingly dependent, sexually confused, self-destructive, masochistic, tortured, debased, flawed creatures, mindless, giddy, and incapable of rising above a repellent biological frailty (Mellen, 1973). This tunnel vision on the psyche of women was further amplified by the exploitation of women's voluptuous image and stereotyped images based upon partial truths; e.g., the degraded lesbian portrayed in Frederique of Les Biches as a predatory seducer of children and as a pathetic, abject non-entity as in Bamford in the Fox (Mellen, 1973). If homosexuality were indeed an arrested development of heterosexuality, the film-maker had the choice to approach the topic with disgust or compassion which would not preclude achievement in other areas, a constructive, developmental, and educative approach. The slow progress women have made with the law also attested to the pervasiveness of sexism (Rawalt, 1973; Women's Rights Law Reporter, 1972, 1972/73, 1973, 1974; Hughes, 1970, 1971).

The effects of cultural conditioning manifested themselves in many ways. In 1971, a sample of readers of all religious denominations of the Psychology Today magazine were surveyed on selected attitude items. It was shown that almost one-half of the responding women and men expressed that women can best overcome discrimination by working with men in organized groups; almost three-fourths thought that women can best achieve full development by getting the best education possible; about one-third felt that women were absent from work and quit more frequently than men; and more than two-thirds agreed to some degree that child rearing as a full-time job could not keep most women satisfied (all p's = <.0001, Tavris, 1973). The great majority (73 per cent) approved of equality in housekeeping and child care, but only 15 per cent of the married men actually shared such responsibilities (Tavris, 1973) and in a recent poll conducted by the Chicago Daily News, 60 per cent of the respondents thought that both parents ought to share the "position as head of the family and that marriage was a partnership"; however, it could not be ascertained whether the 5 per cent that viewed neither parent as head of the family or did not respond thought that these responsibilities were shared by all family members according to their ability to contribute to the homemaking

function (News for & from housewives for E.R.A., August, 1974). In 1972, the value of homemaking services to family living amounted to $13,391.56 a year (Bender, 1974). Twelve different tasks were assigned the prevailing market rate (an average of $2.46) and multiplied by the number of hours to arrive at that figure.

The passage of social security legislation to include homemaking activities would tend to alleviate financial conditions during retirement years for those individuals able to pay into the plan, but it would not provide the immediate relief needed by most persons for such emergencies as pending litigation, adequate coverage for health needs that are preventive in nature (family planning, care of the young, recreation for all family members, child-care/development facilities, short-term, low-interest loans for emergencies; and more rapid processing procedures for existing measures), and for those exceptional circumstances when multiple needs exist at the same time for the same individual or several individuals within a family unit. An alternate procedure would be to grant social security credit for homemaking functions and other worthy volunteer activities that provide constructive, wholesome services to society with a great expenditure of time and talent such as Boy and Girl Scouts of America and 4-H activities.

This discussion, however, was limited to formal education and examples from the literature follow.

Sandler (1972) stated that women students found isolation to be among the most difficult forms of discrimination with which to deal and that the classroom was frequently used to ridicule women and to remind them that they were mainly sex objects. She found that counselors-in-training of both sexes urged women to enter education rather than such fields as engineering. Statements like the following were made to women clients (Sandler, 1972, p. 10): "Would your husband resent your being an engineer?"; "Engineering is very technical."; and "You normally think of this as a man's field."

Women who encountered sex discrimination in the field of Business Administration were interviewed. One single woman, who had worked full time for more than 20 years as an executive secretary and administrative assistant, said, "A man of less intelligence and training will be put in an office management position by most nationally known companies rather than a woman" (Katz, 1970, p. 88). Another woman with a master's in business administration expressed herself this way:

> Discrimination has been mostly subtle, not necessarily written policy, ranging from meetings planned in men-only clubs to delegating heavy responsibility without appropriate status and authority . . . I would like to add that, in general, I have overcome these obstacles but it is always something that had to be overcome . . . There was, instantly, opposition to hiring me for my present job by the men at other campuses. They thought it would hurt their image to have a woman planner (Katz, 1970, p. 88).

Others argued that much of discrimination was unconscious; but nonetheless, it was still pernicious if it limited human growth, happiness, and contribution to society (Thompson, 1973). For example, in the study conducted by the Johnson O'Connor Company of Boston who, since 1922 had administered aptitude tests to 330,000 persons who wondered what careers they should pursue, the findings showed underutilization because (1) women were more likely than men, by a factor of 3:2, to have ability to grasp ideas and theories, the touchstone of the successful executive; (2) men outnumbered women, by a factor of 2:1, at the top echelons of big business in the ability for three-dimensional visualization, important in the physical sciences, medicine, architecture, city planning, and engineering; and (3) women's presence in these professions was below what their aptitudes indicated (Thompson, 1973).

Preferences of High School Seniors

Who will go to college and into educational administration? People in educational administration have varied backgrounds and many had reached that goal by means other than the direct route of entering a program called Educational or Business Administration. What types of students ought to be encouraged? Certainly those who expressed an interest and, in addition, had the ability to acquire the competencies required.

In a survey conducted by Cross (1972) for the Comparative Guidance and Placement Program (CGP) of the College Board, high school seniors with high and low "A" grade point averages were asked to state their occupational, academic, and subject matter preferences (See Tables 1 and 2). In examining the results, it was evident

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Insert Tables 1 and 2 about here

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that women students expressed preferences that ranged from a low of 33 per cent to a high of 79 per cent for those activities that would fall under educational administration. It was particularly enlightening to note that almost three-fourths of all these students expressed a need for educational and vocational counseling. Apparently, these students felt that they did not have realistic knowledge about the long-range planning needed and the various means by which a goal can be reached. Financing an education, of vital concern to all, became more eimportant to an individual who had the scholastic ability but who did not have the financial means. Hence, counseling was paramount in importance. Also, it was found that the most popular occupational choice of 78 per cent of the low-A girls was typist or secretary and that 69 per cent of the low-A boys chose auto mechanics (Cross, 1972). No doubt, these students were taking care of their personal and short-term financial needs as typists were hired at all competency levels and young people save a lot of money whether reparing their own and/or somebody else's car. The preference listing unfortunately did not inquire if the young men desired to be fathers and homemakers

but only inquired if the young women expressed a preference to be "housewives." Past experience with our educational system, delinquency, child abuse, and the national defense confirmed the fact that the rearing of children and youth was a multiple responsibility that involved both sexes yet was not perceived to be a joint responsibility within the home (Joesting, 1971; Joesting & Joesting, 1972; 1973). There was a lack of congruence between the attitudes expressed by male respondents for the sharing of these responsibilities and for actually peforming the activities involved (Tavris, 1973; News for & from housewives for E.R.A., August, 1974). Laws for the achievement of these ends were apparently lacking. Illinois state Senator Dawn Clark Netsch stated that changes had taken place in family life and that it was time that the laws caught up with these changes (News for & from housewives for E.R.A., August, 1974, p. 2) and aided their development in those geographical areas not so endowed.

It should not be overlooked, however, that test scores were not the only indicators. The findings of a study on the precollege preparation of black college students (Bindman, 1966), strongly suggested that poor high school academic training was a factor in the inadequate preparation of Negro students for college and that subjective measures such as personal interviews would be an additional technique for appraising their readiness for college rather than some "culture-free" objective intelligence test. It was evident from Table 2 that counseling was needed; e.g., at the most 11 per cent of the students picked mathematics as their most liked subject, yet all sorts of interest was expressed for activities such as teaching, research, business, and the professions that required this instruction. Sells (1973) found that 51 per cent of the entering male freshmen at Berkeley had four years of high school mathematics instruction which was true for only 8 per cent of the women students. In some geographical areas like Southern Illinois, more than 90 per cent of the administrators surveyed wanted children to express themselves creatively and realistically, yet the instruction necessary to achieve the mathematical skills needed in solving social problems was almost completely denied to both sexes (Muhich, 1968).

Of 35 percent who responded to the questionnaire mailed to a sample of universities and colleges in 50 states, Thompson (1973) found that, in business administration, 11 schools encouraged men only and 36 schools encouraged women and men equally. The distinction was more marked in engineering where 12 schools guided men only as opposed to 24 who counseled both women and men (Thompson, 1973). Responses from the 66 per cent who did not respond, no doubt, would have been more discouraging. Even so, more than one-half of the respondents did not answer the more subtle questions on women's issues.

College and Graduate Admissions

The mean scores of the Scholastic Aptitude Test (SAT) from the College Board Score Reports of 1970 for a national sample of all secondary school seniors, compared with students who planned to enter college in 1969-1970, showed no difference in the average scores of males and females on the verbal portion; but men scored significantly higher than women on the mathematical section (Cross, 1972). Likewise data from the admissions testing program of the American College Testing Program reflected typical sex differences on subject-matter tests: overall, women scoring higher in English, men scoring higher

in mathematics and science, with virtually no difference in social studies (Cross, 1972). This same patterning of results was found for entering freshmen at SIU-C (King, 1969).

In 1968, the overall acceptance rate for admissions to college was 75 per cent for men and 60 per cent for females (Cross, 1972). If the women scored very high on the verbal portion of the SAT (over 700, which was the score of the top 1 per cent of high school graduates), their chances of obtaining admission to college were as good as the men's. The closer a woman was to average, the more severe the discrmination became as seen in Table 3. The greatest discrepancies in the prestige 4-year liberal arts college occurred for those young women who ranked in the top and second one-fifth of their high school class, the differential being 21 per cent and 30 per cent fewer women admitted in the top and second fifth, respectively. At the state university, the greatest discrepancies occurred with those women ranking in the second and third tenth of their high school class, 31 per cent and 22 per cent fewer, respectively. At all levels, fewer women than men were admitted. At Wayne State, a large decrease in graduate enrollment occurred in almost all program areas and the same patterning occurred for 621 professional schools (See Table 3).

Insert Table 3 about here

In the state of Virginia, during a 3-year period, 21,000 women applicants were rejected from college admittance while not one male student was denied admittance (Perkins, 1970). The unanswered question remained: Was college admittance a game to be played with numbers or a right of every individual?

Even though 52 per cent of the Macalaster population was male, only 36 per cent of the nominees selected for admittance were female (Higgins & Rossman, 1973). In examining the performance scores of male-female nominees amd male-female nonnominees, the major findings showed glaring discrepancies: (1) female nominees significantly outranked male nominees when the variable under study was Converted High School Rank [the best single predictor of future academic success (Muhich, 1970; 1972)]; (2) there was no significant difference in performance of male-female nominees on the SAT Verbal, Academic Achievement on the Strong Vocational Interest Blank, and Number of Different High School Activities and Projects; while male nominees significantly outperformed female nonnominees on the SAT Math (p's = <.01). No mention was made of the remedial measures to be taken to correct the noted deficiencies.

Many educational institutions were still discriminating against women in undergraduate admissions. Male applicants were markedly preferrred over females at the low ability level, but this difference disappeared at the higher levels (Walster, Cleary, and Clifford, 1970). Even in those colleges where it appeared that men and women were represented equally, women did not have equal representation within departmental units and the number of women who eventually entered graduate school dramatically decreased. Of the 48 career programs at CUNY, all were predominantly male fields. Male students were more widely distributed among the career programs, half of their number being concentrated in six programs--accounting, business, computer science, data

processing, electrical technology, marketing, and mechanical technology. Ten thousand women enrolled in these programs: 75 per cent were in 7 programs, each of which had 90 per cent or higher female enrollment--mostly in nursing and secretarial science.(The Status of Women at CUNY, 1972). Although the percentage of women undergraduate students had been increasing since the 1950s, so that it was now 41 per cent, it was still less than the percentage of women undergraduates in 1920, when women were 47 per cent of the undergraduates, or in 1899 when 53 per cent of all undergraduate degrees went to women (Sandler, Stanley, & Gleaves, 1972).

In a relatively new doctoral program at SIU-C for the years 1960-1972, it was found that (1) women doctorates had lost the small yearly gains they experienced in earlier years; (2) men had a 2- to 13-year head start; (3) men started with a base three times greater than women; (4) men doctoral graduates increased in number 25 times by 1972; (5) women doctoral graduates increased 95 times by 1970 (peak year); (6) women then experienced declines of 3 per cent and 2 per cent in 1971 and 1972, respectively; (7) 6 of the 22 doctoral programs accounted for all women doctorates in 1972; and (8) 7 of the 22 doctoral programs had graduated no women doctorates to date; namely, Chemistry, Geography, History, Mathematics, Molecular Science, Physics, and Sociology (Muhich, 1973). Overall, 90 per cent of the doctoral degrees were awarded to men and 10 per cent were awarded to women.

Of the variables affecting graduate student satisfaction, collegiality of faculty-student relationships (the colleague-colleague variety) was by far the best predictor of both academic satisfaction and nonacademic satisfaction (Gregg, 1973). For females there was no correlation between either type of satisfaction and the expectation-reality discrepancy (ERD: the discrepancy between what the student expected to encounter in graduate school upon entering and what was perceived to be the reality of graduate school as experienced). For males, the correlation between academic satisfaction and nonacademic satisfaction with ERD (-24 v -19) was significant at the .005 level. Thus the sex variable had a significant effect between ERD and satisfaction. One possible explanation could be that women entered graduate school with less definite or clear-cut expectations than did men; and, therefore, the impact of ERD would be lesser for women (Gregg, 1972). Another possible explanation could be that the several other forms of collegiality such as teacher-pupil, master-apprentice, employer-employee, or master-slave prevailed.

Results of a survey of faculty and graduate students conducted during 1970-71 at Johns Hopkins University modestly contributed to the understanding of contemporary psychology and provided some bases for future speculation. Broadly, the study sought answers to the question, "What do you feel is the single most issue confronting psychology today?" Because psychologists were divided over the issues of social relevance confronting psychology today, the results reported here were restricted to academic psychology. The results of the Lipsey (1974) study showed a generally decreasing function relating social concern to experience in psychology. Mid-career faculty expressed a

lack of enthusiasm for the promoting-human-welfare, solving-social-problems model of psychology that distinguished them from the new faculty and students. A similar, but less pronounced pattern, also appeared for the experimentalism factor. Social relevance generated the most heat, the demand that psychology involve itself constructively in the widespread social problems that beset society and thereby to the solution of social problems (Lipsey, 1974).

Financial Aid

Across the nation, more women students entering college than men needed help finding a job (41 percent v 32 per cent) and required financial aid (32 per cent v 26 per cent) (Cross, 1972). Similar results were reported for approximately 25 per cent of Wayne State University's new freshmen who came from families with parental income of less than $8000 annually (Sandler, 1972).

Due to discriminatory policies, women students generally received a disproportionately low number of financial aids. Examples at Wayne State University follow: (1) 19-23 per cent more undergraduate men than women were receiving scholarships, grants, loans, and jobs; (2) 1-4 per cent more graduate men than women were receiving loans and jobs; (3) 22 per cent more men were receiving Graduate Professional Scholarships which were administered by the graduate office; (4) 12 per cent more women than men were graduate assistants (Liberal Arts only) and 21 per cent more women than men were instructors (Education only); and (5) women were underrepresented in the number of graduate assistantships and instructorships in all academic units that provided work experience that would help students in their later attempts to find employment (Sandler, 1972).

Sandler (1972) also indicated that a lack of adequate child-care facilities was one of the many barriers blocking full participation in higher education by women and that many colleges were willing to spend enormous sums on athletic facilities ($94,560 for men v $2,254 for women at Wayne State in 1971) but recoiled at the thought of establishing such facilities as nurseries, which principally benefited women and in turn, their families. Existing facilities were minimal, expensive, and unavailable during evening hours and for children under 2 1/2 years of age; and in general, more varied facilitative services were needed such as women's centers and clinics on human sexuality.

Analysis of graduate financial aid at CUNY indicated that graduate women had more restricted access to financial aid than did graduate men or undergraduate women. Although graduate women received aid in proportion to their representation in 1971-1972, only 43 per cent of all monies went to women--the amount received per woman averaged $1000 less than the amount received per man (The Status of Women at CUNY, 1972).

More than twice as many men as women were in the Research Training Fellowship Program sponsored by the 1969 Elementary and Secondary Education Act and seven times more men (88 per cent) than women (12 per cent) were 1961-62 National Defense Education Act Fellows (Lyon & Saario, 1973).

At the University of California, Berkeley, among the Woodrow Wilson Fellows for men, having children made no statistically significant difference in dropouts; for women, having children made a difference of 31 per cent fewer women in the physical sciences (Sells, 1973). Among those with any second-year support, the effect on men was to reduce dropouts by fourteen percentage points; among women in the physical sciences, second-year support made a difference of 40 percentage points (Sells, 1973).

In reviewing the amounts of monetary awards at a midwestern university, the median salaries for women foreign students (with student visas[1]) were either zero or several hundred dollars lower than those of their male counterparts. In three of the four position titles, the male mean salaries were several hundred dollars larg-er than the mean female salaries with one exception in which they were fairly close, and the low reported was not a true representation for that category because it was a second or third position held. Some reporting inaccuracies existed due to delays in processing changes in status, but were minimal in number; therefore, the reporting is based on a close estimate. Usually, the reporting delays due to number of new job holders were offset by the number whose term appointments expired. The distribution of financial assistance showed slight gains for the women as noted below:

	1969-70	1972-73
Number	22	49
Women foreign students	$29,237	$89,607
Per cent of awards	16	33

Women had always participated in Ford Foundation-supported activities in the fields of education, humanities and the arts, international affairs, equal opportunities for minorities, housing and urban development, resources and the environment, government and law, and public broadcasting. Overall, women's representation had been proportionately low and only within recent years had their proportions grown. To date, Ford Foundation had granted women approximately $7 million but data reported was sketchy (That 51 per cent: Ford Foundation activities related to opportunites for women, 1974).

The grants awarded to schools, colleges, universities, and other organizations by the Carnegie Corporation of New York for the fiscal year ending September 30, 1973, showed that (1) over $1.1 million was given directly to African universities; (2) over $1.5 million went for joint programs between U. S. universities with African universities; (3) only a little over $.5 million went to the southern states for regional programs; (4) over $2 million was given to each of three different states: California ranked highest, then Massachusetts, and New York: over $1 million in grants went to the District

[1] This category excluded those who had already attained permanent residency (Muhich, 1974).

of Columbia (Washington, D.C.), and the state of Vermont ranked fifth high; (5) only seventeen of the fifty different states were represented as revealed in the grant descriptions. In was impossible to ascertain all eventual destinations from the descriptions in the booklet and there was a discrepancy of more the $.6 million between the amount appropriated by the trustees for the fiscal year ending Septmeber 30, 1973, and the actual amount awarded in grants as listed in the List of Grants taken from the Annual Report of 1973 for the Carnegie Corporation of New York. -Areas within states were not evenly represented; e.g., the several instituions within the state of Illinois (6th high) were awarded $750,000--$700,00 remained Upstate (Chicago area) and only $50,000 went Downstate (Galesburg). The six lowest ranking states (grants under $16,000) were New Jersey (lowest) Michigan, Colorado, Oregon, Hawaii, and Maryland. Programs within the states of Pennsylvania, North Carolina, Florida, Connecticut, Alaska, and Alabama received grants over $100 thousand but lesser than $.5 million (Muhich, In process analysis).

Fellowships and scholarships such as Guggenheim, Nieman, Rhodes, Fulbright-Hays, and Danforth, have been almost exclusively, or in very large proportions, benefiting male rather than female recipients (Nies, 1974). In 1972, for example, about 10 per cent of the awards from these sources went to women and over $4 millions was awarded by the Guggenheim Foundation alone. Overall, 80 per cent of all major fellowship awards went to men; in the most prestigious programs (largest g-rants), 95 per cent of the recipients were male (Nies, 1974).

The College Scholarship Service established tables that made unrealistic demands on upper-middle income people (those earning from $15,000 to $20,000 a year) at a time of increased cost of living and inflation in general (Winkler, 1973). As mentioned in the Mondale Memo, July, 1974, "today we are pushing toward that 20 per cent breaking point . . . the point at which hyper-inflation breaks out, where inflation feeds on itself . . . " The Mondale memo also stated that the burden of this unprecedented combination of inflation and recession had fallen very unevenly, with poor and middle income Americans suffering the most, while others were virtually untouched; e.g., the average worker's real earnings were down 4.6 per cent from a year ago while coprorate profits after taxes rose 16 per cent in the last year and now rose to 79 per cent above their 1969 level. One decided reason for these lopsided values was that people were receiving greater amounts of money for lesser production. Excerpts from Senator Gurney Reports from Washington, August, 1974, stated that monetary expansion must be brought more in line with growth in productivity...In the last four years, the money supply had grown an average of 6.7 per cent and in the last six months it had gone up 8.1 per cent, while productivity had only increased an average of 2.7 per cent in the last seven years ...A family of four making $20,000 a year as recently as 1967, would have to make $28,000 now just to stay even.

The burden of middle-income families continued to grow as Middle Americans seriously questioned paying taxes to support education for others that they themselves could not afford for their own children and for whom they could not obtain financial aid. Hard

data on the precise effects of financial aid policies were not readily available. However, undergraduate aid was stressed in the budget, and the President recommended spending $701.8 million in fiscal 1973 for a combined program of educational opportunity grants and work-study funds (Fields, 1972). Many funds, though, which were approved by the Congress were subsequently withheld by the administration. Consequently, about 50 suits had been filed seeking release of fiscal 1973 funds; e.g., the U. S. District Court had ordered the release of $140 million in White-House-impounded appropriations for health research and medical schools in response to two suits filed by the Association of American Colleges seeking release of these funds (Fields, 1973).

Recruitment

Principally, problems associated with recruitment of women in educational administration had to do with lack of congruence between the attitudes of male personnel who did most of the hiring and the actual numbers of women employed. Arter (1972b) summed up the position of the university in this manner: (That almost all of the chief officers responded that they were favorably disposed to hiring women and yet few women were eating the administrative cake seemed a strange paradox." In other words, the willingness of a president to hire women and the actual number of women administrators employed and recognized as coworkers were completely different--one expressed an attitude (which may or may not be a true representation of feelings) and the other was positive action. Women who considered a career important frequently complained about prejudice in recruitment and hiring practices and of unwillingness on the part of employers to delegate administrative responsibility to women, thus augmenting the differential promotion, tenure, and seniority policies already in existence for women and men (Katz, 1970).

Taylor's (1973) doctoral thesis concerning attitudes toward men as administrators showed that (1) other things being equal, male superintendents were most likely to hire women as administrators; but that (2) one-half of the school systems studied did not encourage women to train or apply for administative positions; and (3) analysis of the data revealed that the only factor which appeared to have any significance on the hiring process was that of sex.

In examining the recruitment activites at higher administrative levels at CUNY, findings were inconclusive (The Status of Women at CUNY, 1972): (1) Although individuals active on search committees were interviewed, the committee was unable to determine whether women were underrepresented in the applicant pool for each search in terms of their availability within the national and CUNY work force; (2) some members admitted that search committees invariably evaluated women differently from men when women appeared as candidates for appointment; and (3) search evaluation committees were composed of men.

Robinson (1971) found that men in educational administration had three times the initial job offers and were able to secure positions in institutions they preferred in a greater proportion than women; and many women did not apply for administrative positions simply because of nepotism rules, immobility, or becuase they felt that women who took the time to apply would not get the job anyway.

The creating of new position titles for like functions to avoid a basis for comparison or the shifting of titles were recruitment techniques used; e.g., at Wayne State, the research assistant and research associate positions had been filled in central administration by individuals who had been assigned tasks which were traditionally assigned to administrative assistants. By using the research assistant and research associate classification, the administration had removed the individuals so classified from the bargaining unit to which they rightly belonged and thereby had removed the restrictions with respect to position posting, salary, and job security. This maneuver was of particular interest since individuals had been recruited into the university to fill jobs which were not made available to those already employed at the institution (Sandler, 1972). At NOrthern Illinois University, a registered nurse was included in the clerical/secretarial class rather than professional/semi-professional and was one of the highest paid in this class but started only 25¢/hour above a grounds worker. However, after a 6-month probationary period, the grounds worker received $3.74/hour, thus earning 2¢/hour more than the nurse (Pielstick, 1973).

A sample of 1972 AERA (American Educational Research Association) Placement Bureau registrants were mailed questionnaires, but the data reported did not disclose the number of females and males (Mathews & Reed, 1974). Data were reported for resulting number of interviews, methods by which candidates and employers established contact for accepted jobs, and suggested job-seeking methods. This study also showed that job placement of new doctorates in education was highly dependent upon who the candidate knew and who the candidate's professors knew. The three most frequently used methods by which candidates and employers established contact for <u>accepted</u> jobs were (1) major professor, (2) other professors at candidate's university, and (3) professional acquaintances at other universities. In more than one-fifth of the hirings, it was found that the candidate also knew someone at the hiring institution.

No significant differences were found in job mobility between men and women psychologists in the Southeast (Kimmel, 1974). How then did the apparent myth that women were a bad risk start? One possibility suggested by the Kimmel (1974) study was that, though women were no more mobile than men, the reasons why they changed jobs were viewed to be less valid, that is, less socially acceptable, thereby placing a kind of stigma on the move. This same action taken by the male spouse would be viewed as advancing himself professionally.

Representation of Women in the Labor Force and Professional Organizations

Due to the difficulties women with adequate credentials experienced with initial recruitment (discounting the problems associated with cultural conditioning), women in educational administration were grossly underrepresented in the labor market in terms of (1) percentage of doctorates awarded to women nationally (Table 4), and (2) their availability from the faculty ranks: more than three-fourths at the elementary level, almost one-half at the secondary level, and almost one-fifth at the college and university levels (Tables 5, 6, and 7, respectively). An examination of the availability of women in the various fields showed that women were underrepresented in all areas except Home and Family Life Education and Home Economics--two areas in which men were grossly underrepresented (See Table 4).

Insert Table 4 about here

The plight of women in educational administration needed further examination from several vantage points: (1) at the elementary and secondary levels; (2) at the college and university levels; (3) in professional organizations independent of the school settings; (4) in state departments of education; (5) on school boards; (6) in the U.. S. Office of Education, and (7) in educational research.

Nationally, women constituted a majority (67 per cent) of the public education teaching profession, but were not so represented (16 per cent) in administrative positions in public education (Lyon & Saario, 1973). The reason was not obviously one of entry into the profession, but of differential advancement for women and men within the ranks. Most of the men in administrative positions in public education began their careers as teachers, and no relationship was found between formal administative preparation and the quality of staff leadership of school principals (Gross, 1964).

Elementary and Secondary Levels. The results obtained at the state level confirmed the trends at the national level. A look at table 5 compiled for administrators in elementary and secondary schools in the state of Illinos showed decreases in numbers of women administrators in each post between the years 1968-1971 (Chesebro, 1972).

Insert Table 5 about here

A look at the decreases of women in educational administration in the state of New York showed declines in 8 of 11 and no, or very small, increases in 3 of the 11 professional fields examined between the years 1970-1972 (See Table 6).

Insert Table 6 about here

Only 10 per cent of all administrative positions in the Waco Independent School District of Texas were held by women (Farrar, 1973). These positions carried the highest salaries, and promotions were usually from within the system, from the ranks of teachers, 75 per cent of whom were women. In other words, 90 per cent of the administrators who were men came from the ranks of teachers, only 25 per cent of whom were men. Of 46 principals, only 5 were women and all were in elementary schools.

A 1970 National Education Association survey reported that (1) in elementary schools women outnumbered men teachers nearly 9:1--but 68 per cent of all elementary school principals were men; (2) in the secondary schools, the proportion of men and women teachers was about equal, yet 96 per cent of secondary school principals were men; (3) out of 13,000 school superintendents in this country, only three were women (Taylor, 1972; Thompson, 1973).

College and University Levels. In the more than 300 colleges and universities who responded to the Carnegie-ACE survey (Astin & Bayer, 1972), it was found that women constituted 19 per cent of the teaching faculty and were available for administrative activities in larger numbers than their actual representation. Other indicators than per cent of time spent in administration (in which women were at a decided disadvantage) were larger numbers of women carrying full teaching loads (overall 63 per cent; undergraduate 69 percent) the very small 4 per cent receiving salaries of $17,000 or more v the 63 per cent receiving salaries under $10,000 and time spent in research (See Table 7).

Insert Table 7 about here

During 1972, City University of New York (the largest urban university in the world, consisting of 9 4-year institutions, 8 2-year institutions, an upper division college, a graduate school, and an affiliated medical school) employed approximately 22,000 faculty, administrative, and support staff and served about 230,000 students. Women in educational administration at CUNY were grossly underrepresented at the highest levels. The almost complete absence of women in top administration at more than 150 colleges and universities, summarized in Table 8, showed that the median number of males in top administative posts in the National Association of State University and Land-Grant Colleges was 18 while the median number of females was zero (Arter, 1972a).

Insert Table 8 about here

An examination of 40 coeducational institutions surveyed by Robinson (1971) at the college and university level showed great variability in the participation of women in the total faculty, ranging from 2 to 35 per cent; 36 of the 40 schools reported a participation rate of 25 per cent or less; half of the schools employed

less than 16 per cent women; women were found in positions which had minor relationships to policy-making, were at middle-management level, or performed tasks primarily sex-stereotyped; the mean number of women department heads in all schools was less than 3/institution (mostly in home economics, physical education, English, languages, nursing, and education); and women were less likely to be represented on committees for guidance, scholarships, judicial problems, long-range planning, institutional research, admissions, education, or advisory policy (Table ;8). Staffing patterns varied tremendously between coeducational and non-coeducational schools. Women's colleges had the highest ratios of women faculty members. Five women's colleges ranged from 23 to 58 per cent women faculty members (Robinson, 1971). In schools exclusively for men, there were fewer women faculty members than men in women's educational institutions; Three men's schools ranged from 1 to 8 per cent women faculty members (Robinson, 1971).

Overall, 22 per cent of women at CUNY were found in educational administration, concentrated most heavily in the positions called Assistant Officer or Assistant To (Table 9). Sex stereotyping was

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Insert Table 9 about here

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evident in both the administrative and supportive staff. The few women in high positions were concentrated where they had powers and influence only over female students and faculty (The Status of Women at CUNY, 1972). In the dean series, women had no representation in 27 of the 41 different functional units (See Table 10). The 6 women

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Insert Table 10 about here

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deans were in 5 different functional units: biological sciences, humanities, social sciences, students (2), and teacher education. The Dean of Contemporary Studies was a black male with no associate or assistant. Most units did not have persons assigned to the three possible posts in the dean series; e.g., if a dean, associate dean, and assistant dean appeared in each of the 41 functional units, there would be a total of 123 different position slots. Forty-three of these 123 units were unassigned and several persons were often assigned to one unit; e.g., in the Faculties, there were 6 male deans, 1 female and 2 male associate deans, and 2 female and 2 male assistant deans. Men failed to have representation in only 3of the 41 different functional units: biology, nursing, and teacher education.

The differential predictive effects on rank, tenure, and salary in relationship to sex and amount of time spent in administration were thoroughly reviewed. In the regression equation for women and men combined, when female sex was partialed out after all 30 variables had entered, the results indicated that sex was a better independent predictor of rank than (1) time spent in administration, (2) number of years since completion of degree,(3) number of books published, or (4) numbers of years at current institution (Astin &

Bayer, 1972). Variables that were more important than time spent in administrative activities in predicting academic rank for women that were of lesser importance for men were age, size of institution, and marital status: single (See Table 11). Age was a significant variable for men but not to the extent that it was for women. Single or

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Insert Table 11 about here

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divorced women were more likely to hold high ranks, the implication for married women being that the burden of child rearing was the woman's. A single or divorced woman did not have to follow a husband when he changed jobs and moved to a new location and was freer to move if she so chose. Large families predicted high rank for men which was not necessarily true for women. The Humanities were the slowest to promote for both men and women. Men in engineering and women in the health fields (medicine and nursing) were more likely to achieve high ranks than their counterparts in other departments. Still based on the Astin & Bayer (1972) study, other indicators of the greater difficulty of predicting academic rank for women than for men were those variables that were significant predictors of academic rank for women but did not enter into the regression equation for men; namely (1) protestant background, (2) native born, (3) liberal arts college, (4) selectivity of institution, (5) research interests, (6) fellowship (graduate stipend), (7) divorced, (8) size of institution, (9) single, (10) Department: Health, and (11) public institution; and secondly, those variables that were significant predictors of academic rank for men but did not enter into the regression equation for women were (1) major in education, (2) department of engineering, (3) private nonsectarian institution, (4) degree from top 12 institutions, (5) per cent of Ph.D.'s on faculty, (6) institution in southeast, and (7) number of students in class.

In predicting tenure for academic women, the predictors that showed greater variability than time spent in administration were (1) university, (2) age, and (3) year of degree. These variables were of lesser significance for men than time spent in administration. Variables more significant than time spent in administrative activities for women but not for men were (1) public institution, (2) private sectarian institution, (3) per cent of Ph.D.'s on faculty, and (4) major in Humanities. In securing tenure for men, number of children carried more weight than time spent in administration. Number of children was a significant variable in predicting tenure of academic women, but to a lesser degree than time spent in administrative activities. A major in business was also a significant variable for women, but was not so for predicting tenure for men. The variables cited below did not enter into the regression equation in predicting tenure for each of the sexes.

Men	Women
Public Institution	Affluence of Institution
Private Sectarian Institution	Years Employed in Academe
% of Ph.D.'s on Faculty	Number of Articles Published
Major in Humanities	Private Nonsectarian Institution
Major in Business	Coeducational Institution
	Major in Physical Sciences

Sex was also a better independent predictor of salary than such other factors as number of years of professional employment or doctoral degree and produced the greatest discrepancies (Astin & Bayer, 1972). Even though the regression equation for women contained 6 fewer significant variables for predicting salaries than it did for men, the 2 variables which carried the most weight for men (salary base and rank) were not readily available to women--Women started at a significantly lower base salary than men and promotion in rank for women required consideration of 5 more variables than for men with a somewhat lower resulting multiple R, indicating greater difficulty in predicting ranks among women than among men (See Table 11). There was a significant difference in salary base (r = .13 v .26) between women and men (p = <.01). Even though the time spent in administration was a significantly weighted variable for predicting salary for both women and men, it ranked 6th in importance for men and 14th in importance for women. The other variables having larger "F" ratios when considering amount of salary for women v men (over and above years spent in administration) were (1) doctoral degree, (2) university, (3) size of institution, (4) tenure, (5) selectivity of institution, and (6) years employed in academe. Two more variables ranking higher in importance than years spent in administration for predicting women's salaries which did not enter into the regression equation for predicting men's salaries were (1) private sectarian institution and (2) Roman Catholic institution. The professional/medical degree and Department of Fine Arts were significant variables for women while divorced, number of children, and Department of Engineering were significant variables for men in prediction of salaries. It was interesting to note that years in academe ranked at the bottom of the list of 32 variables needed to predict men's salaries while this same variable ranked 13th among 26 variables in the prediction of women's salaries.

Sophie (1974) concluded that the large differences in education between women and men accounted for most of the differences in publications, another way of stating that sex was the best independent predictor.

State and Federal Agencies. Analysis of information taken from state education directories for the years 1950, 1963, and 1973, in state departments of education throughout the U.S. showed that the total percentage of women in policy-making positions had decreased from an average of 14.5 per cent in 1950 to an average of 6.8 per cent in 1972 (Marr, 1973). Throughout the country male employees held many more educational policy-making positions in educational administration than did females; e.g., in the California State Department,

women were channeled into positions that reflected the traditional women's roles (nutrition, library services, and homemaking); and only 14 women out of a total of 430 employees in "titled" positions fell into other types of positions (Marr, 1973). Discrimination may not have existed for those positions in which women were "traditionally" hired, but this concept needed generalization to all career areas.

In the Connecticut State Department of Education, April, 1973, women constituted 17 per cent of the professional and 84 per cent of the nonprofessional force (Taylor, 1973). In addition, Taylor (1973) reported a $5,000 male-female differential in the average salary as summarized below:

Average Age	School Administrators	Average Salary	Per Cent over $15,000
33	80,000 male	$13,625	37
37	18,000 female	8,625	16

In the U. S. Office of Education on October 30, 1972, women occupied 5 per cent of all leadership positions in Grades 16, 17, and 18, as shown below (Taylor, 1973):

	Women	Men	Per Cent Women
GS 18	0	4	0.0
GS 17	2	11	15.0
GS 16	1	34	3.0
Total	3	49	5.0

Average Grade GS 7 GS 14

Two years later, those women educational leaders ranking in the upper grade level quartile were distributed somewhat evenly among the several grade levels while men were more heavily concentrated in the higher grades (See Table 12). Conversely, in the lower grade level quartile, male educational leaders were distributed among the numerous grade levels while women were concentrated more heavily in a few of the lowest grades. The average grade for men was 4 or 5 levels higher than it was for the women (Fishel & Pottker, 1974).

Insert Table 12 about here

This same study showed that only one female was chief state school officer and that Illinois and Wisconsin were the only two states without departments of education.

Professional Organizations and Educational Research. In the National Education Association, Taylor (1973) reported an almost equal number of women and men who were state association presidents (24 v 24), but 50 men and no women were Executive Secretaries. Women headed some teachers' unions, too. Though the American Federation of teachers actively supported equal rights for women, only 150 of its 900 union locals had women presidents (Thompson, 1973).

The field of educational research, dominated by and controled for men's interests, showed a decided lack of participation by women. The American Educational Research Association was run primarily by men (Taylor, 1973). A women's caucus had been convened, a task force on women in education had been formed, as well as a special interest group for next years' convention. A survey of program titles showed that only 4 of 300 programs involved issues concerned with sex bias at the 1973 AERA conference and 16 were concerned with racial bias. Female subjects dealt with (1) Perspectives on Female Education, (2) Sex Role Development and Sexism, (3) Racial, Ethnic, and Sexual Bias in College Admissions, and (4) Distaff Feedback.

In the area of budget for educational research, the college and university's share of funding rose by 12 per cent in 1973, an increase of $.3 billions distributed as follows: (1) National Science Foundation, an increase from $391 million to $446 million; (2) the Department of Health, Education, and Welfare, $1 billion to $1.2 billion administered, in part, through the National Institute of Health; (3) Research Applied to National Needs, $80 million, a 43 per cent increase; (4) $4 million for efforts to improve research management at universities; (5) $28.7 million increase in science research projects; with (6) a $6 million decrease in graduate student support and no funds for graduate science programs (Fields, 1972).

The 1974 National Institute of Education Budget was cut from $162 million to $142 million by the House and (in mid-October) emerged from the Senate at $75 million(Stivers, 1973).

> . . . But a new joint congressional provision for fiscal '74 operations ties the amount of a continuing resolution to the lowest figure approved by either house . . . in short, if . . . vetoed, the NIE budget for fiscal '74 could not exceed the Senate-approved $75 million level (Stiver, 1973, p. 9).

The above statement (operating under a continuing resolution at a level of $75 million) was reaffirmed by the Director of NIE, Department of Health, Education, and Welfare (Glennan, 1973).

Board of Trustees. Over all schools sampled, women trustees averaged 1 in 8 (Robinson, 1971). In toto, in 1972, for all 50 states, there were 66,879 male and 11, 763 female local school board members (Fishel & Pottker, 1974). The highest proportion was 40 per cent female in Alaska and the lowest was 2 per cent female in Arkansas. The median per cent on a national scale was 10 (Illinois and Washington) (Fishel & Pottker, 1974).

Regional Associations. In the Southeastern region, women psychologists in academe replicated the national pattern that women psychologists were "a minority group." One women (2 per cent) chaired a southeastern graduate psychology department; only 8 females headed any of the 333 graduate psychology departments in the United States; no member of the Southeastern Education Psychology Association's Executive Committee was female, and there had been only one woman among SEPA's 20 presidents (Kimmel, 1974; Kimmel, Joesting, Brodsky, Piacente, Sophie, & Pendergrass, 1974).

The status of women in academe in the Southeast was related to the size of department and institution. Both male and female psychologists received lower salaries in the small institutions when compared with their counterparts in the larger institutions, but the larger institutions did more discriminating against women than the small institutions (Joesting, 1974). While the women graduate students felt as secure about their professional presence as the males did, they perceived personal attitudes from the faculty which indicated that women in the psychology graduate programs in the Southeast were not yet fully accepted as individuals (Brodsky, 1974). At the University of South Florida, when there was reason to doubt competence, women professionals were perceived of lesser competence than men. Overall, competence in women was viewed as a loss in femininity, those characteristics popularly considered in heterosexual and/or social interactions (Piacente, 1974).

Trends

The recent trend of cutbacks and terminations in higher education also had discriminated against women. In Illinois, the point to note was that women were being fired at twice the rate of men, and married women at an even greater rate (Saperstein & Kaspar, 1973).

Platitudes were continuously voiced about the supply of superior intelligence found in women, but at each level of advancement within the educational system the participation of women declined more than it did for men. Reports, such as "Escape from the Doll's House" by Saul Feldman, submitted to the Carnegie Commission, urged that barriers to the advancement of women through higher education be removed and proposed actions to eliminate loss of talent and unfair discrimination against women (Birnbaum, 1973). The emphasis also had shifted to universal postsecondary education. In light of this trend, recommendations that would benefit women at all age levels that followed from the literature are listed below. The broader objectives have been incorporated, but more extensive treatment on select program objectives can be found in the Joint Task Force Report entitled "Sexism in Education" (Pennsylvania Department of Education, 1972); The Higher, the Fewer (1974); and in such newsletters as Senator Gurney Reports from Washington, August, 1974; the Mondale Memo, July, 1974; News for & from housewives for E.R.A., August 15, 1974; and in Congressional Records such as Percy, July 9, 1974; and the WEAL-Abzug analysis of Title IX sex discrimination regulations, July 18, 1974.

Enforcement for Action Goals

The recommendations that follow were grouped under the four headings of (1) financial assistance and funding; (2) removal of sexism from programs; (3) recruitment, promotion, and employment practices; and (4) facilitative services.

Financial Assistance and Funding

1. Inform women and men students who are eligible for assistantships and instructorships as to availability and award equally to both sexes.

2. Have the graduate office monitor the selections for assistantships and instructorships made by the academic units.

3. Distribute athletic facilities and funds equally for females and males, all ages.

4. Grant financial support to women based on individual requirements, independent of marital status.

5. Require a comprehensive accounting of the existing access of women to fellowship support and to service awards for teaching and research.

6. Grant pro-rata equivalency benefits and financial assistance to women who wish to pursue subsequent professional careers on a full-time as well as on less than a full-time basis.

7. Equate funding among educational facilities as well as within these institutions.

8. Request more research money for scientific investigations in education.

Removal of Sexism from Programs

9. Encourage all departments and faculty members to re-evaluate their course offerings and contents; and, where pertinent, to add courses and sections of courses that pertain to women and their contributions.

10. Ensure that all libraries contain all basic works with respect to such subjects as the history of women's rights and suffrage movements and the participation of women in the professions and politics; e.g., women in law, bibliographies, and feminist materials in general.

11. eliminate sex-segregated classes, programs, activities, and courses of study.

12. Eliminate special rules for women and men (housing, hours, athletics, jobs, etc.).

13. Establish the same admission qualifications for women and men.

14. Include information on women, presentation of female role-models and feminist perspectives of history, psychology, sociology, and politics, economics, and law. Include all ethnic groups and encourage such qualities as tolerance and compassion.

15. Set annual goals for hiring, training, and promoting women of all races and all ages at every level of employment.

16. Develop women's studies as an integral part of the curriculum.

17. Implement women's studies programs in universities; women's studies courses in colleges, high schools, and feminist programs; units in women's studies, sex education, alternative roles in family structures in elementary and junior high schools.

18. Implement non-sexist counseling at all levels.

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19. Eliminate sex-segregated classes, especially in elementary, junior high and high schools, and of sex-segregated activities in kindergarten and elementary schools.

20. Eliminate sexist textbooks.

21. Create summer institutes, especially in educational schools, which give teachers academic credit for taking consciousness-raising and teaching-of-feminism courses.

22. Organize public meetings and programs to discuss sexism in the schools.

23. Prepare periodic evaluation reports, including specific suggestions on what to do and on how the school can improve.

24. Provide for flow of information from the state department of education to concerned community members.

25. Compile course work equivalents which would translate the life experiences of women into acceptable credits.

26. prohibit discrimination in textbooks and other curricular materials.

Recruitment, promotion and Employment Policies

27. Seek female applicants for all posts in educational administration and other jobs when interviewing for these positions.

28. Identify the hiring of professional women for state administrative positions as an organizational priority.

29. Publicize widely position vacancies on all openings through job postings and listings in university and profesisonal media. Include title, minimum qualifications required, person to contact, amount of salary, and a deadline for application.

30. install faster communications systems such as electronic answering service so that job listings are updated on a daily basis and be available on a 24-hour basis.

31. Analyze hiring policies toward its own graduates to determine if they had a differential effect on women.

32. Review all policies and practices to eliminate those which have the effect of discriminating against the members of one sex; e.g., pregnancy, not acknowledging receipt of applications, etc.

33. Appoints committees with proportional representation of women to deal with recruitment, promotion, salary, tenure, etc., of administrators, faculty, and staff.

34. Initiate recruitment and incentive programs to encourage the participation of women and men students in all academic units and at all levels of study.

35. Monitor all recruiting literature, rejecting all literature that advertises positions specifying sex of the applicants, or uses language indicating that only men are acceptable applicants.

36. Survey women who have taken part in university-arranged interviews for the purpose of identifying those companies whose representatives discourage women applicants.

37. Recruit women as students in programs related to leadership positions in education, including educational administration.

38. Reflect the same balance of staff and faculty by sex and race in each job class at all employment levels (including administration) of the state's general labor force.

39. Compile better data on how easily women are able to enter or re-enter graduate school after an interruption in their education.

40. remove obstacles to placement--Are potential qualified women in the immediate area hired before outsiders?

41. Analyze all personnel policies and eliminate any which directly or indirectly support discriminatory practices, including policies about leaves of absence, pregnancy, part-time employment, and child-care/development services.

42. Provide the employee who works part-time with the option of participating in fringe benefit programs.

43. Provide social security payments for all part-time employees and as a second option to full-time employees with other plans.

Facilitative Services

44. Survey female personnel for interest in administrative positions.

45. Design professional career ladders leading to promotions and follow through with appropriate action for women.

46. Analyze all educational policies and programs for their capacity to encourage female students to become professionals and to develop the capacities basic to multiple career options, and eliminate practices which discriminate against female students.

47. Analyze alternative means for certification as school and school district administrators.

48. Conduct career planning programs aimed at encouraging women and men to consider new fields of study and work.

49. Inform publishers of the standard interest inventories to revise the instruments, manuals, and norm groups to eliminate sex stereotyping of women.

50. Develp chaild-care/development programs for children of staff, faculty, and students, with costs acoording to ability to pay.

51. Implement flexible registration and enrollment practices in all degree programs.

52. Provide legal counsels for students, faculty, and administration with appeal procedures and due process of law.

53. Develop procedures for the handling of student complaints regarding the discriminatory treatment of women in the classroom and for reprimanding of those staff members and faculty who violate this sensitivity and civility toward women.

54. Establish a "continuing education" center in the appropriate existing institutions of higher education for women returning to finish college, for those who have not yet begun a college education and/or have not finished high school and for those who wish retraining.

55. Publish evaluation criteria for each program.

56. Monitor the implementation of established policies. If a school is violating any basic policies, e.g., not meeting any required criteria, the evaluators shall send an official letter stating violations and giving the school a reasonable time in which to implement the policy or to show cause.

57. Allow each school an opportunity to show cause for failure to follow the established policies.

58. Withhold funds from school districts until such time as the school meets the required evaluative criteria.

59. Develop a working relationship with the school personnel (teachers, parents, and students) and people in the school district.

60. Report any problems to the state department of education and conduct public hearings for this purpose.

61. Increase the personal income tax, medical and other benefits to increase real wages and, in turn, the productivity of the people.

62. Eliminate discrimination from the Federal Income Tax and other funding

63. Regulate scholarships and other aid established under a foreign will, trust or bequest so they are not exempt from the law.

64.

Table 1

Occupational Preferences of Female High School Seniors[1]

Female Preferences[2]	% Favorable Low A (N = 11,230)	% Favorable High A (N = 11,728)
High Preference by Low A Students		
Nurse	59	49
Office Manager	56	40
Bookkeeper	55	32
High Preference by High A Students		
Author of Novel	60	76
High School Teacher	45	64
College Professor	33	62
College President	43	55
Sculptor	27	50
No Difference by Ability		
Social Worker	79	78
Elementary Teacher	66	68
Guidance Counselor	57	60
President of a Large Company	51	48
Housewife[3]	85	84

[1] Abstracted from Table 18, pp. 94-95 (Cross, 1972).

[2] Females did not choose auto mechanic, army officer, electrical engineer, space person, U. S. Senator, or police officer. Males did not choose sculptor, social worker, elementary or high school teacher, and guidance counselor.

[3] No counterpart was recorded for males such as househusband, houseman, or homemaker.

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Table 2

Life and Subject Preferences of Women High School Seniors[1]

Preferences	% Favorable Interest Subgroups: Business	Health	Lib. Arts	All Women in CGP Group
Kind of life preferred				
Academic (Teaching, research, etc.)	8	13	68	26
Business	62	2	3	12
Professional (Doctor, lawyer, etc.)	1	50	4	11
Home and Family	12	11	11	19
Undecided	8	8	6	14
Other	8	17	8	17
Subject most liked				
English	24	18	28	27
Mathematics	10	11	5	9
Physical Education	13	8	10	12
Sciences	4	35	5	11
Shop or Commercial	26	2	2	6
Social Sciences	11	13	29	14
Other	11	13	21	21
Would like counseling on educational and vocational plans and opportunities	73	75	79	69
Know exactly work desired after education	31	65	38	28
Caucasian	35	34	55	74
Black American	54	56	38	19
Other	11	9	7	7

[1] Abstracted from Table 13, pp. 64-65, (Cross, 1972).

Table 3

Rates of Acceptance to College

4-Year Liberal Arts College[1]

(N = 711 men and 601 women applicants)

	% Women	% Men
High School Class Rank		
Top fifth	66	87
Second fifth	14	44
Third fifth or below	20	22

State University[1]

(N = 1921 women and 1835 men)

Top tenth	92	98
Second tenth	52	83
Third tenth	21	43
Fourth tenth	22	32
Fifth tenth	31	23
Lower half	25	41

Wayne State University[2]

% Women Enrolled Fall Quarter, 1971

College	Undergrad.	Graduate	First Professional
Engineering	2	2	
Business Administration	8	2	
Pharmacy	21	16	
Liberal Arts	42	35	
Education	65	60	
Nursing	95	94	
Medicine			10
Law			11
Social Work			63

Table 3 Continued

621 Professional Schools[3]

School	Mean Percentage Women	Minority	Student-Faculty Ratio	Full-Time Faculty	School's Budget from University Funds
Engineering	2	7	18	87	71
Forestry	4	1	17	86	56
Optometry	5	19	4	35	15
Business	10	6	28	80	82
Dentistry	10	4	4	48	40
Law	10	8	19	71	84
Theology	10	19	7	68	34
Medicine	11	14	2	55	30
Architecture	12	9	13	73	89
Veterinary Med.	13	3	11	91	53
Pharmacy	25	8	13	73	62
Public Health	38	14	3	80	31
Journalism	43	5	24	80	90
Education	60	10	[illegible]	80	78
Social Work	60	19	[illegible]	78	54
Library Science	75	8	46	63	84
Nursing	96	7	11	89	68

[1] Source: Computed from data given in the College Handbook, 1969. Abstracted from Tables 31 and 32, pp. 150-151 (Cross, 1972).

[2] Abstracted from Table 1, Sanders, 1972, p. 5.

[3] Abstracted from Table 2, Margulies and Blau, 1973, p. 27.

Table 4

Percentage of Doctorates Awarded to Women Nationally (1960-1969)[1]

Academic Unit	% Women
Engineering (Total)	,44
Business Administration (Total)	2,82
Pharmacy (Total)	4,26
Education	
Educational Administration	12.86
Music Education	13.69
Secondary Education	15,94
History and Philosophy of Education	20.29
Educational Guidance and Counseling	20,70
Special Education	23,41
Educational Psychology	25,60
Art Education	26.80
Physical Education	27,53
Business Education	29,67
Elementary Education	38.28
Home and Family Life Education	99,19
Liberal Arts	
Physics	2,00
Geology	2,47
Geography	5.58
Economics	5,62
Mathematics	6.50
Chemistry	6,82
Political Science	8,80
Philosophy	11.05
History	11.71

Table 4 Continued

Academic Unit	% Women
Journalism	12,08
Music	13,51
Biology	13.82
Speech and Dramatic Arts	15,87
Sociology	17.07
Art	18,18
Psychology	20,20
Anthropology	21,44
English and Literature	24.09
Latin and Greek	25.30
Foreign Language and Literature	28.52
Home Economics	76.26

[1] Source: Council for University Women's Progress, University of Minnesota, June, 1971. Percentages reported by the U. S Office of Education for Earned Degrees Conferred from 1966-1969 (Sandler, 1972).

Table 5

% Women in Administrative Positions in Illinois, 1968-71[1]

Position	1968-69	1970-71	% Change Between 1968-1971
Elementary Teacher	79.3	77.9	-1.4
Secondary Teacher	42.0	41.4	- .6
District Superintendent	5.0	4.0	-1.0
Administrative Asst.	13.4	10.0	-3.4
Asst. Superintendent	6.6	3.4	-3.2
Elementary Principal	21.4	18.2	-3.2
Jr. High Principal	6.0	4.1	-1.9
Sr. High Principal	1.6	1.5	- .1

[1] Abstracted from Chesebro, 1972, p. 142.

Table 6

% Women in Educational Administration, N. Y. State, 1970-71/1971-72[1]

Professional Field	1970-71	1971-72	% Change Between 1970-1972
Superintendent	0.4	2.6	+2.2
Deputy Superintendent[2]	11.9	7.1	-4.8
District Principal	1.8	1.8	0.0
Business Official	10.3	4.3	-6.0
Administrative Assistant	20.8	12.7	-8.1
Elementary School Principal	21.1	20.1	-1.0
Middle School Principal	4.6	7.8	+2.9
Jr. High School Principal	8.0	7.8	-0.2
Sr. High School Principal	22.6	1.7	-0.9
Elementary School Teacher	82.7	82.6	-0.1
Junior & Senior School Teacher	58.3	47.1	-11.2

[1] Source: Public School Professional Personnel Report 1970-71 and 1971-72, the State Education Department, Albany, N. Y. Abstracted from Lyon and Saario, 1973.

[2] This category includes Assistant Superintendents,

Table 7

Indicators of Administrative Post

Source of Data	Indicator	% Women	% Men
57 2-year colleges	Full teaching loads		
168 4-year colleges	(9 or more class		
78 Universities			
(Astin & Bayer, 1972)	hrs./week)	63	49
Respondents:	Undergraduate teaching	69	48
N = 60,028	Undergraduate teaching-		
Eligible Sample:	ing, universities only	48	24
N = 17,273 men	% teaching faculty	19	81
N = 4,583 women	Salary of $17,000 or		
Weighted Random Sample:	more	4	19
N = 3,454 men	Salary under $10,000	63	28
N = 3,438 women	Achieved high rank	25	44
	Research interests	11	27
	Graduate Research		
	Assistants	19	38
	Never published in a		
	professional journal	63	39
	Doctoral Degree	22	46
	M.A. or less	62	36

Table 8

% Women in Top Administrative Posts

Name of University	Chancellor	President	Dean	Chair	Committees
City Univ. of N. Y. (The Status of Women at CUNY, 1972)	0	10	10	15-55	
U. of Illinois, Champaign-Urbana (Ferber & Loeb, 1970)	0	0	0	7	9
Southern Illinois Univ., Carbondale (Mines, 1973)	0	0	0	2	some
Florida School System (Robinson, 1971)	ranged from 2-12%				
118 institutions[a] National Association of State University & Land-Grant Colleges (Arter, 1972a)	0	<2[b]	Nursing and Home Economics Only		
34 coeducational institutions (Robinson, 1971)	0	0	0	2	some[c]
U. of California, Berkeley (Robinson, 1971)	0	0	0	0	<1
Cornell (Cook, 1972)	0	0	0	6 depts,	some
Wayne State (Sandler, 1972)	3% administrative; 19% administrative and professional				

Table 8 Continued

[a] 60% appointed no women in the 1st 5 years; 17% considered women in the last 5 years; 1/3 had not considered women; 1/2 did not answer the questions; and the following 17 states had no females in top-level administration: Arizona, Arkansas, Connecticut, Hawaii, Idaho, Kansas, Kentucky, Maine, Maryland, Mississippi, Montana, New Hampshire, New Mexico, Oklahoma, South Dakota, West Virginia, and Wyoming (Arter, 1972).

[b] At CUNY.

[c] Only 7 campus reports mentioned participation of women in faculty governing bodies; e.g., over the past 10 years at the University of Chicago, only 2 women appeared on the list of 100 to 110 university boards, committees, and council appointments (Robinson, 1971).

Table 9

% Women Holding Administrative Posts at CUNY[1]

Post	Number of Men	Number of Women	% Women
Registrar	15	0	0.0
Higher Education Officer	43	3	6.5
Assistant Business Manager	20	2	9.1
Dean	94	10	9.5
Assistant Business Manager	39	7	15.2
Assistant Dean	35	7	16.7
Higher Education Associate	69	15	17.9
Associate Dean	49	16	24.6
Assistant to Business Mgr.	74	28	27.5
Associate Registrar	15	11	42.3
Assistant to Higher Educ. Officer	98	74	43.0
Assistant Registrar	34	38	52.8
Higher Education Assistant	66	37	55.9

[1] Abstracted from the Status of Women at CUNY, 1972, pp. 11-12.

Table 10

Representation in the Dean Series, CUNY, Fall, 1971

(N = 41 Functional Units)

Administrative Post	Different Functional Units Represented by		Women	
	Women	Men	Number	%
Dean	5	24	6	10.0
Associate Dean	7	20	8	19.0
Assistant Dean	3	10	4	16,0
Total	14	38	18	17.0
By Race: Black	1	9	1	5.5
Latin	1	3	1	5.5
White	13	37	16	89.0

Table 11

Time Spent in Administration: A Predictor of Academic Rank, Tenure, and Salary (N = 3,438 women; 3,454 men)[1]

	Rank		Tenure		Salary	
Predictor	Male	Female	Male	Female	Male	Female
R (Women & Men Combined)	.79		.72		.80	
No. of significant predictors in regression equation	30		23		33	
Rank position of time spent in educational administration	5		6		11	
R	.80	.77	.73	.70	.81	.76
No. of significant predictors	22	26	17	15	32	26
Time Spent in Administration						
Zero order r	.25	.25	.22	.19	.26	.24
Rank position	R5	R8	R6	R12	R6	R14
Predictors ranking higher than time spent in administration (in order from highest to lowest on basis of F ratio reported)						
2-year institution	R1	R5	R3	NS[2]	R4	R3
Doctorate	R2	R1			R7	R4
Years employed in academe	R3	R3			R32	R13
No. of articles published	R4	R2				
Age	R7	R4	R11	R7	R3	R6
Size of institution	NS	R6			R9	R8
Single	NS	R7				
Rank (Academic)			R1	R2	R2	R2
Years employed at current inst.			R2	R1		
No. of children			R4	R3		
No. of library volumes			R5	R5		

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Table 11 Continued

Predictor	Rank		Tenure		Salary	
	Male	Female	Male	Female	Male	Female
Public Institution			NS	R4		
University			R8	R6		
Private Sectarian institution			NS	R8	NS	R7
Percent Ph.D.'s on faculty			NS	R9		
Year of degree			R15	R10		
Major in humanities			NS	R11	NS	R11
Salary base					R1	R1
Department: Humanities					R5	NS
University					R18	R5
Roman Catholic Institution					NS	R9
Tenure					R22	R10
Selectivity of institution					R10	R12

[1] Abstracted from Tables 1 through 9, Astin & Bayer, 1972, 111-115.

[2] NS = Nonsignificant

Table 12

Upper, Middle, and Lower Quartiles of National Educational Leaders[1] by Sex, 1974

Quartile	Range of Quartile Grade Levels			
	U. S. Office of Education		National Inst. of Educ.	
	Female	Male	Female	Male
Number	1501	2760	205	104
Lower	1-5	1-12	2-6	2-9
Middle	5-11	12-14	6-11	9-14
Upper	11-17[2]	14-18[2]	11-15[3]	14-15[3]
Average grade	7	12	8	12

Number of State Education Leaders by State and Sex, 1972[1]

	Range of Quartiles		
	% State Board of Education Members Women, 1972	Number of Women	States in order from highest per cent to lowest per cent women
Upper	30-57	3-5	Alaska, Connecticut, Iowa, South Dakota, Vermont, New Jersey, Alabama, Nevada, Utah, Wyoming, and Kansas
Middle	13-29	1-5	All others[4]
Lower	0-11	0-1	Arizona, Maine, Rhode Island, West Virginia, Louisiana, New York, Tennessee, South Carolina, Arkansas, Florida, Kentucky, Mississippi, and North Dakota

Chief State School Officer[1]

49 male

1 female (Montana)

[1] Based on data obtained from Tables 1, 2, and 3, Fishel & Pottker 1974, pp. 4-5.

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[2] At grades 16, 17, and 18 there were 27, 10, and 4 men and 2, 2, and 0 women, respectively.

[3] Of the 26 men in the Upper Quartile of grade levels, 25 were in grade 15. Women in the UQ were more evenly distributed among grades 11-15.

[4] Illinois and Wisconsin did not have state departments of education.

References

Adamsky, C. & Kaspar, E. A. (In process textbook survey.) Department of Psychological Services, Purdue Univ., Fort Wayne, & Western Ill. Univ.

Arter, M. H. The role of women in administration in state universities and land-grant colleges. Doctoral dissertation, Arizona state university, 1972. (a)

Arter, M. H. She wants her piece of the administrative cake. Speech presented to the American Council on Education, 55th Annual Meeting, Fontainebleau Hotel, Miami Beach, Florida, October 6, 1972. (b)

Astin, H. S. & Bayer, A. E. Sex discrimination in academe. Educational Record, Spring, 1972, 101-118.

Bender, M. How much is a housewife (sic) worth? McCalls, May, 1974. Cited in News for & from housewives for E.R.A. Editors: J. A. Budde & N. Kilkeary, August 15, 1974, II(3), 1108 South Blvd., Evanston, Illinois 60202.

Bindman, A. M. Pre-college preparation of Negro college students. Journal of Negro Education, 1966, 35, 313-321. Cited in L'Abate, L., Oslin, Y., & Stone, V. W. Educational Achievement in Miller, K. S. & Dreger, R. M. (Editors). Comparative studies of blacks and whites in the United States. New York: Seminar Press, 1973, 325-354.

Birnbaum, N. The Carnegie Commission: The politics of the future. Change, November, 1973, 5(9), 28-37.

Brodsky, A. Women as graduate students. American Psychologist, 1974, 29(7), 523-526.

Chesebro, P. What about equal rights for women? Illinois Education, April, 1972, 142-146.

Cook, A. H. Sex discrimination at universities: An ombudsmen's view. AAUP Bulletin, 1972, 58(3), 279-282.

Cross, K. P. Beyond the open door. San Francisco: Jossey-Bass Inc., Publishers, 1972.

Farrar, L. WEAL report on Waco independent school district, Texas, WEAL National Newsletter, 538 National Press Building, Washington, D.C. 20004, May, 1973, 4.

Ferber, M. & Loeb, J. Rank, pay, and representation of women on the faculty at the Urbana-Champaign campus of the University of Illinois, November, 1970. ED 045 011

Fields, C. M. Nixon higher education budget raises aid to disadvantaged students, minority centers. The Chronicle of Higher Education, VI(17), January 31, 1972, 2.

Fields, C. M. Administration ordered to free impounded health-research money. The Chronicle of Higher Education, November 5, 1973, VIII(7), 1.

Fishel, A. & Pottker, J. Women in educational governance: A statistical portrait. Educational Researcher, July/August, 1974, 3(7), 4-7.

Glennan, T. K. Personal correspondence, November 14, 1973.

Gregg, W. E. Several factors affecting graduate student satisfaction, The Journal of Higher Education, 1972, XLIII(6), 483-498.

Gross, N. Staff leadership in public schools: A sociological study. John Wiley & Sons, 1965. Cited in Lyon, T. N. & Saario, C. D. Women in public education; Sexual discrimination in promotions, Phi Delta Kappan, LV(2), October, 1973, 120-123.

Higgins, P. S. & Rossmann, J. E. Student characteristics preferred by the faculty at a liberal arts college. Journal of College Student Personnel, May, 1973, 14(3), 225-230.

The Higher, the Fewer. Report and recommendations: Committee to Study the Status of Women in Graduate Education and Later Careers, Executive Board Document of the Graduate School, the University of Michigan, Ann Arbor, Michigan, March, 1974.

Hughes, M. M. The sexual barrier: Legal and economic aspects of employment. University of California Hastings College of Law, November, 1970. Supplement 1. April, 1971. 2116 F Street, N.W., Box 7C2, Washington, D.C. 20037.

Joesting, J. Comparison of women's liberation members with their non-member peers, Psychological Reports, 1971, 29, 1291-1294.

Joesting, J. Women in academe. American Psychologist, 1974, 29(7), 520-523.

Joesting, J. & Joesting, R. Attitudes about sex roles, sex, and marital status and anti-war demonstrators, Psychological Reports, 1972, 31, 413-414.

Joesting, J. & Joesting, R. Sex differences among entering college freshmen--Fall, 1970. Psychological Reports, 1973, 32, 911-914.

Katz, J. Educational and occupational aspirations of adult women. Stanford University, California Institute for study of Human Behavior, 1970. ED 045 005

Kimmel, E. Women as job changers, American Psychologist, 1974, 29(7), 536-539.

Kimmel, E. with Joesting, J., Brodsky, A., Piacente, B. S., Sophie, J. & Pendergrass, V. Status of women in the psychological community in the Southeast: A case study. American Psychologist, 1974, 29(7), 519-540.

King, W. R. Grade point average and ACT scores: A report on 1967-68 freshmen class. Counseling & Testing Center, Carbondale Campus, Southern Illinois University, May, 1969.

Lipsey, M. W. Research and relevance: A survey of graduate students and faculty in psychology. American Psychologist, 1974, 29(7), 541-553.

List of grants. Carnegie Corporation of New York, 1973. Annual Report for 1973/The report on program.

Lyon, D.C. & Saario, T. N. Women in public education: Sexual discrimination in promotions, Phi Delta Kappan, 1973 LV(2), 120-123.

Macleod, J. & Silverman, S. You won't do. KNOW, Inc., P. O. Box 86031, Pittsburgh, Pennsylvania 15221.

Marr J. Women in state departments of education. Phi Delta Kappan, 1973, LV(2), 142-143.

Mathews, W. M. & Reed, C. L. How do novice educational researchers find jobs? Educational Researcher, July/August, 1974, 3(7), 13-14.

Mead, M. Sex and temperament in three primitive societies. New York: Morrow, 1963, or New York: New American Library, 1950.

Mellen, J. Women and their sexuality in the new film. New York: Horizon Press, 1973.

Mines, K. A. Findings of the compliance review conducted by the Department of Health, Education, and Welfare, Region V. Rare Books Room, Morris Library, Southern Illinois University, Carbondale, March 2, 1973.

The Mondale Memo. Anti-recession tax cut amendment introduced and As I See It, July, 1974, United States Senate, Washington, D.C. 20510.

Muhich, D. Scaling public school administrators attitudes in Carbondale, Illinois, to ascertain views toward comprehensive mathematics program, CEMREL. Southern Illinois University, Carbondale, May, 1968.

Muhich, D. Multivariable prediction of selected measures of college success. Doctoral thesis, Southern Illinois University, Carbondale, 1970. (Ann Arbor, Michigan; 1970. University Microfilm No. 71-10,037).

Muhich, D. Cross-validation of a behavioral model for predicting school success. Educational and Psychological Measurement, 1972, 32, 439-442.

Muhich, D. Doctoral graduates from Southern Illinois University, Carbondale, by Program and Sex (1960-1972). Graduate School, Southern Illinois University, Carbondale, 1973.

Muhich, D. Financial assistance awarded to male and female foreign students with student visas at SIU-C, 1969-70 and 1972-73. Southern Illinois University, Carbondale, April, 1974.

Muhich, D. An analysis of grants made by the Carnegie Corporation of New York. Southern Illinois University, Carbondale (In process).

National Organization for Women. Central New Jersey Chapter. Dick and Jane as victims. Sex stereotyping in children's readers. Women on Words & Images. P. O. Box 2163, Princeton, New Jersey 08540. (a)

National Organization for Women. National Capitol Area Chapter in consultation with Dr. Muriel Cantor, American University. Women in the wasteland fight back. A report on the image of women portrayed in TV programing. Filed with the Federal Communications Commission on August 31, 1972. (b)

News for & from housewives for E.R.A. Editors: J. A. Budde and N. Kilkeary. - August 15, 1974.

Nies, J. Women and fellowships. Report No. 1, Women's Equity Action League, 799 National Press Building, Washington, D.C. 20024, April, 1974.

Pennsylvania Department of Education. Sexism in Education, 100 N. Cameron Street, P. O. Box 3145, Harrisburg, Pennsylvania 17101.

Percy, C. H. Sex discrimination in education. Congressional Record, Proceedings and debates of the 93d Congress, second session, 120)101) Washington, July 9, 1974.

Perkins, D. Discrimination against women. Section 805 of H.R. 16098, Committee on Education and Labor, Part 1: June 17, 19, 26, 29, 30, 1970. Part 2: July 1 and 31, 1970.

Piacente, B. S. Women as experimenters, American Psychologist, 1974, 29(7), 526-529.

Pielstick, M.F.J. Status report of civil service women at Northern Illinois University. Report submitted to the Illinois Commission on the Status of Women, March 2, 1973.

Rawalt, M. Women are constitutional outcasts. (Abstract), 1600 S. Joyce Street, Arlington, Virginia 22202.

Robinson, L. H. The status of academic women. ERIC Clearinghouse on Higher Education, April, 1971. ED 048 523

Sandler, B. Today and tomorrow: Annual report of the commission on the Status of Women, Wayne State University, Detroit, August, 1972.

Sandler, B., Stanley, R., & Gleaves, F. Project on the status and education of women. Association of American Colleges, 1818 R. Street, N.W., Washington, D.C. 20009, Newsletter No. 3, April, 1972.

Saperstein, E., & Kaspar, E. A. Preliminary report on the education committee. Illinois Commission on the Status of Women, March 30, 1973.

Sells, L. W. Review of research on attrition and completion. (In process doctoral thesis, University of California, Berkeley.) February 24, 1973.

Senator Gurney Reports from Washington. United States Senate, Washington, D.C.20510, August, 1974.

Sophie J. Women as scholars. American Psychologist, 1974, 29(7), 529-532.

The status of women at the City University of New York: A report to the chancellor. Chancellor's advisory committee on the status of women at CUNY, December, 1972, 535 East 80 Street, New York 10021.

Stivers, P. NIE: Learning about congress the hard way. Educational Researcher, November, 1973, 2(11), 8-9.

Tavris, C. Who likes women's liberation--and why: the case of the unliberated liberals. Journal of Social Issues, 1973, 29(4), 1175-198.

Taylor, S.S. Educational leadership: A male domain? Phi Delta Kappan, 1973, LV(2), 124-128.

That 51 per cent: Ford foundation activities related to opportunities for women. Ford Foundation, Office of Reports, 320 East 43 Street, New York City 10017. Library of Congress Catalog Card Number 74-79495, April, 1974.

Thompson G. Minerva, Go home! California Baptist College, 8432 Magnolia Avenue, Riverside, California 92501, 1973.

Walster, E., Cleary, T. A., & Clifford, M. M. The effect of race and sex on college admission. Sociology of Education, 1970, 44, 237-244. 1971

Winkler, K. J. Women administrators seek way out of isolation. The Chronicle of Higher Education, November 5, 1973, VIII(7), 5.

WEAL-Abzug analysis of Title IX sex discrimination regulations, The Congressional Record, 120(107), July 18, 1974.

Women's Rights Law Reporter. Domestic relations, 1972, 1(2), 180 University Avenue, Newark, N. J. 07102.

Women's Rights Law Reporter. Sex discrimination in employment, 1972/73, 1(3), 180 University Avenue, Newark, N. J. 07102.

Women's Rights Law Reporter. Sex discrimination in employment, Part II, 1973, 1(4), 180 University Avenue, Newark, N. J. 07102.

Women's Rights Law Reporter. Pittsburgh Press, 1974, 2(1), 180 University Avenue, Newark, N. J. 07102.